

## CLAIMS

What is claimed is:

1. A method of adding an element to a partition of a partitionable computer system comprising

5 receiving an instruction to join the partition by the element;  
determining the security status of the element;  
updating a routing table of a routing device in communication with the partition when the security status of the element is secure; and  
transitioning the security status of the element to unsecure.

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2. The method of claim 1 wherein the receiving comprises receiving the instruction from a processor of the partition.

3. The method of claim 1 wherein the updating comprises adding an element  
15 identifier to a route enable mask of the routing device.

4. The method of claim 1 wherein the determining comprises accessing a register.

20 5. A method of moving an element from a first partition of a partitionable computing system to a second partition of the partitionable computing system comprising:  
receiving an instruction to join the second partition by the element;  
removing the element from the first partition;  
updating a routing table of a first routing device in communication with the  
25 second partition when the security status of the element is secure;  
updating a routing table of a second routing device in communication with the first partition when the element is removed from the first partition; and  
transitioning the security status of the element to unsecure.

30 6. The method of claim 5 wherein the receiving comprises receiving the instruction from a processor of the first partition.

7. The method of claim 5 wherein the updating comprises adding an element identifier to a route enable mask of the first routing device.

8. The method of claim 7 wherein the updating further comprises removing an element identifier from a route enable mask of the second routing device.

9. The method of claim 5 wherein the determining comprises accessing a register.

10. The method of claim 6 further comprising rebooting the element after the removing.

11. The method of claim 10 further comprising performing self-initialization by the element.

12. The method of claim 11 further comprising transitioning the element from an unsecure state to a secure state after the self-initialization.

13. A method of transitioning an element associated with a partition of a partitionable computer system comprising:  
removing the element from the partition; and  
rebooting the element thereby causing the element to transition to a secure state.

14. The method of claim 13 wherein the rebooting comprises performing self-initialization by the element.

15. A method of removing an element from a partition of a partitionable computing system comprising:  
receiving an instruction to remove the element;  
removing the element from the first partition; and  
updating a routing table of a routing device in communication with the partition when the element is removed from the first partition.

16. The method of claim 15 wherein the receiving comprises receiving the instruction from a processor of the partition.

5 17. The method of claim 15 wherein the updating comprises removing an element identifier from a route enable mask of the routing device.

18. The method of claim 15 further comprising rebooting the element after the removing.

10 19. A method of forming a partition of a partitionable computing system during a boot process comprising:

receiving an instruction by an element to join the partition;

determining the security status of the element;

15 updating a routing table of a routing device in communication with the partition when the security status of the element is secure; and

transitioning the security status of the element to unsecure.

20 20. The method of claim 19 wherein the receiving comprises receiving the instruction from a processor of the partition.

21. The method of claim 19 wherein the updating comprises adding an element identifier to a route enable mask of the routing device.

25 22. The method of claim 19 wherein the determining comprises accessing a register.

23. A computer readable medium comprising instructions configured to add an element to a partition of a partitionable computer system by:

30 receiving an instruction to join the partition by the element;

determining the security status of the element;

updating a routing table of a routing device in communication with the partition when the security status of the element is secure; and

transitioning the security status of the element to unsecure.

24. A computer readable medium comprising instructions configured to move an element from a first partition of a partitionable computing system to a second partition of the partitionable computing system by:

receiving an instruction to join the second partition by the element;  
removing the element from the first partition;  
updating a routing table of a first routing device in communication with the second partition when the security status of the element is secure;  
updating a routing table of a second routing device in communication with the first partition when the element is removed from the first partition; and  
transitioning the security status of the element to unsecure.

25. A computer readable medium comprising instructions configured to remove an element from a partition of a partitionable computer system by:

receiving an instruction to remove the element;  
removing the element from the first partition; and  
updating a routing table of a routing device in communication with the partition when the element is removed from the first partition.

26. A computer readable medium comprising instructions configured to create a partition of a partitionable computer system during a boot process by:

receiving an instruction by an element to join the partition;  
determining the security status of the element;  
updating a routing table of a routing device in communication with the partition when the security status of the element is secure; and  
transitioning the security status of the element to unsecure.